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REMARKS

Claims 1-6, 8-19, 22 and 24-39 are pending in this application. Claims 1, 22, 24, 25, 29 and 32-39 have been amended by this Amendment.

The Office Action dated September 8, 2005 repeated the rejection of claims 1, 2, 5, 14, 19, 24-28, 38 and 39 as being anticipated by Deakin; and repeated the rejection claims 3, 4, 6, 8-13, 15-17, 22 and 29-37 as being obvious over Deakin further in view of Cobo. The Office Action also responded to applicants' arguments against the rejections. Applicants gratefully acknowledge the indication in the Office Action that claim 18 contains allowable subject matter.

Claim Amendments

Applicants have amended claims 1-37 to change "mobile station" to "user equipment" and to clarify that the user equipment initiates both of the first and second connections. Applicants have amended all of the claims to generally clarify that the first connection is initiated using a call control protocol, and that the charging identification is included in call records which are created by the first and second network elements and sent to a billing system in the communications network.

Anticipation Rejection

The grounds for the rejection of claims 1, 2, 5, 14, 19, 24-28, 38 and 39 as being anticipated by prior art is set forth in part 2 on pages 2-8 of the Office Action. Specifically, the rejection asserts that the claims are anticipated by the GSM/GPRS network shown in Figs. 1 and 2 of U.S. Patent No. 6,463,275 to Deakin (this network hereinafter referred to simply as "Deakin"). The response to applicants' arguments against the anticipation rejection is in the portion of part 5 that appears on pages 21-25 of the Office Action. Applicants again respectfully traverse the obviousness rejection on the grounds that it fails to establish a prima facie case that Deakin includes each and every one of the combination of features recited in the rejected claims.

Deakin is directed to a method of billing in a GSM/GPRS network that facilitates various types of billing, such as hot billing (real-time billing) and pre-paid billing, in addition to normal billing. Deakin proposes that a subscriber or subscription specific Billing Class Identifier (BCI) be implemented as a new parameter in the Home Location Register (HLR)

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and used by a charging gateway to direct billing information to one of several different billing systems (see, for example, Fig. 2 and col. 2, lines 27-43, and col. 3, lines 24-37).

First and Second Network Connections

Applicants previously argued that Deakin does not have first and second connections as recited in the claims. The Office Action, on pages 22-23, responds by pointing to the terminal equipment TE on the right side of the network in Fig. 1 as initiating a first connection "to/from GGSN" and the terminal equipment TE on the left side of the network in Fig. 1 as initiating a second connection "- - - via SGSN - - - to/from GGSN". There are thus two different terminal equipments initiating the two connections rather than one terminal equipment initiating the two connections. Nevertheless, claims 1-37, as amended, now clearly recite that the same user equipment initiates both the first connection with the application layer network as well as the second connection with the transport layer network.

Application Layer Network

Even though Deakin may have two connections, it does not have one connection in a transport layer network and another connection in an application layer network. While a packet data network (PDN) is shown to be connected to the GPRS network, no information is provided about it in the patent except that it is external. There is thus no support for the conclusion that the PDN network in Deakin is an application layer network.

Generating Charging Identification

The claims recite that the charging identification is generated in a first network element in one network. The rejection asserts that the Billing Class Identifier (BCI) in Deakin is such a charging identification and is generated by the GGSN and SGSN. However, the description at col. 4, lines 14-50, of the patent mentions that the BCI is stored in the HLR and is just one parameter in the subscription data. There is simply no indication that the GGSN or SGSN generates the BCI. Indeed, it is the Call Detail Records (CDRs) rather than the BCI that are generated by the GGSN or the SGSN (see col. 1, lines 58-63, and col. 3, lines 24-33, of the patent).

The response to applicants' arguments at the bottom of page 23 states that "by viewing FIG. 2, one can clearly see that NE1 and NE2 (i.e. GGSN and SGSN) generate BCI"

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(emphasis in original). However, this is not the case. Fig. 2 merely shows that "CDR's with BCI" are sent from NE2 to the charging gateway. This does not indicate the NE2 generated the BCI. To the contrary, Figs. 2 and 7 show that "subscriber data with BCI" is sent from HLR to NE1 and NE2, and this indicates that the BCI is already present in the subscription data before it is sent to NE1 and NE2. It follows therefrom that the BCI is not generated in NE1 and NE2.

Sending Charging Identification

There is no indication that the BCI in Deakin is sent to a network element in an application layer network. While the BCI is sent to the Charging Gateway Functionality (CGF), the CGF is in the transport layer network rather than a separate application layer network. The charging gateway is always shown and described in the patent as being separate from the PDN. There is also no suggestion of sending the BCI in Deakin to the PDN, which is asserted to be the application layer network elsewhere in the rejection.

Furthermore, as amended, the charging identification is first sent from a network element in one network to a network element in the other network. The charging identification is included in the call records of the network elements, and then sent from those network elements to the billing system. While Deakin does send the BCI to the charging gateway and the billing system, there is no indication that the BCI is first sent from a network element in one network to a network element in another network. The purported response to this argument on page 24 of the Office Action is not a substantive response and merely repeats verbatim the original rejection on pages 3-4 of the immediately previous office action.

Coordinating Charging Information

In Deakin, the Billing Class Identifier is used to identify the billing class and to forward CDR's to the correct one of multiple billing systems. The network element NE2 passes CDRs with BCI to a charging gateway, which directs CDRs based on the BCI to the respective billing system. The charging gateway thus uses the BCI to determine whether the billing information is sent to billing system A, B or C. The BCI is not used to coordinate charging information between a transport layer network and an application layer network.

The Office Action, on pages 24-25, responds that "BCI (i.e. Billing Class Identifier) is sent from NE2 (also see Fig. 1, SGSN/GGSN) to Charging gateway (also see FIG. 1, CGF),

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and the nodes belongs to either PDN network or GPRS network, respectively." There is simply no indication that any of the elements or "nodes" are in the PDN network. In particular, no information is provided stating if or how the billing of the PDN is coordinated with the billing in the GPRS network. The billing method in Deakin occurs entirely within the GSM/GPRS transport layer network. Although the GSM/GPRS network in Deakin may be connected to an external packet data network (PDN), there is no billing coordination between the PDN and the GSM/GPRS network.

Dependent Claim 28

Claim 28 is a dependent claim reciting the additional limitation that the second network element to which the charging identification is sent comprises a Call State Control Function (CSCF). Applicants argued that the charging gateway functionality (CGF) in Deakin is not a Call State Control Function (CSCF). The Office Action responds by saying that the background, summary, detailed description, drawing and claims are part of the prior art disclosure, which anticipates the argued limitation. Applicants agree that all parts of the patent can be relied upon. However, the description of the calling gateway in Deakin that appears throughout the patent indicates that it receives CDR's and billing class identifier information and passes it onto the relevant billing system. Thus, according to this description throughout the patent, the calling gateway in Deakin is not a CSCF. A CSCF does not perform such functions (see the background section of this application or U.S. Patent No. 6,574,201 for a discussion of CSCF).

Obviousness Rejection – Deakin & Cobo

Applicants traversed the obviousness rejection of claims 3, 4, 6, 8-13, 15-17, 22 and 29-37 on page 11, paragraph 2, of the Response filed on July 5, 2005. The response to applicants' arguments on pages 25-26 is a mere form paragraph and a verbatim repeat of the part of the original rejection on pages 11-12 of the previous Office Action. Applicants respectfully request a substantive response to their argument.

With respect to "address of security information" and claim 33, this was a typographical error. The proper reference is to address or security information as recited in dependent claims 3, 4, 8, 10-12 and 35. Applicants thus request a correct response to the arguments against the obviousness rejection of these dependent claims.

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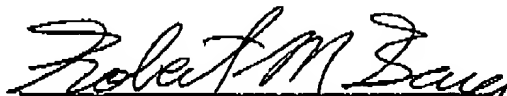
Claim 30

Claim 30 is a dependent claim reciting the additional limitation that the second network element in the application layer network to which the charging identification is sent comprises a Call State Control Function (CSCF). The rejection appears to rely upon the GGSN in Cobo as being in an application layer network and being a CSCF. Such an assertion is incorrect. The GGSN in Cobo is not sent charging identification as recited in the claim and is not located in an application layer network. Furthermore, the GGSN is not a CSCF.

Conclusion

Applicants traverse the rejections for at least the reasons given above and respectfully request a Notice of Allowance. Please charge any fees due in connection with the filing of this Preliminary Amendment, to Deposit Account No. 02-4270 (Dkt. No. NOKIA.30US) and please credit any overpayment or excess fees to such deposit account.

Respectfully submitted,



Robert M. Bauer, Registration No. 34,487
Lackebach Siegel, LLP
Lackebach Siegel Building
One Chase Road
Scarsdale, NY 10583
Tel.: (914) 723-4300
Fax: (914) 723-4301